

Math and the Human Body

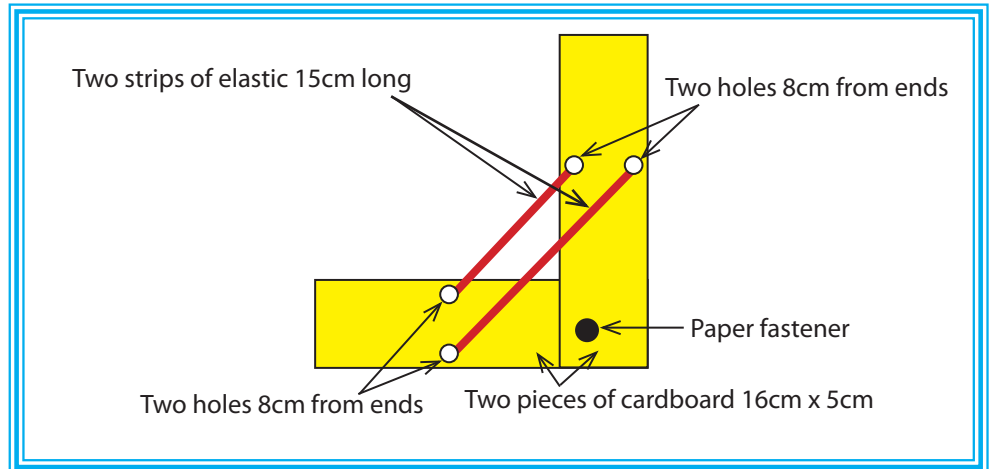
Activity 3 - Making a Model Arm

Muscles and bones give your body shape and help you move around. Muscles and bones work together. Every moving bone has at least two muscles attached to it. This is because muscles can only move in one direction; they only contract (pull). A muscle contracts and pulls a bone to get you into a certain position. Then its partner muscle must contract to pull the bone back and get you out of the position.

In this activity you will

need: cardboard, brass paper fasteners, elastic bands, tape, a ruler and scissors.

Activity Instructions:



1. Cut out two pieces of cardboard, each about 16cm x 5cm. Round the corners.
2. Punch two holes in each piece of cardboard, close to the long edges and about 8cm from the ends. Arrange the pieces as shown and use a paper fastener to make a “joint”.
3. Cut elastic bands to make two strips about 15cm long. Thread the elastic strips through the holes; each strip should go from a hole in the one cardboard piece to the corresponding hole in the other piece. Tie knots in the ends of the elastic strips or tape them to the cardboard to keep strips from slipping through the holes.
4. The cardboard pieces are the bones and the elastic strips are the muscles. The model arm only has two muscles; a real arm has many.

Can you believe THIS is math?